

NAME : Mrs. Kamal GROUP REF. : B1
COUNTRY : France PREF. SUBJECT : 3
REGISTRATION NUMBER : 120171273 QUESTION N° : 1

Environmental issues and the need to optimize the use of resources lead us to consider the life cycle of industrial facilities in a comprehensive way.

The case of underground cables raises technical issues regarding the feasibility of removal. Indeed, some installation methods allow the removal of cables, such as the installation in ducts, for which the cables could be pulled out using the same means as for installation.

This is also the case for the installation in the gallery when there is no interface with other electrical equipment.

However, for cables installed in buried and filled troughs or directly in the ground, it is necessary to use more important means to open all along the trench because the extraction by pulling is more difficult taking into account the friction force directly applied to the cable.

Moreover, any changes occurred at the environment of underground cable links could make it impossible to remove the cables because of the potential risk of soil instability. Therefore, it is important to consider the presence of underground cables in any area before planning constructions or future work next to it.

According to the few removal projects carried out recently, it turns out that the diversity of installation methods doesn't make it possible either to standardize the removal method or to make a single decision for all the underground connections.

The removal decision therefore depends on several parameters

- the technical feasibility for the cables removal and for the installations that surround them
- the cost of removal

It is necessary to accept the fact that the civil engineering works remain in place, even for the installation methods allowing easy removal of the cables such as ducts and dedicated gallery.